



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/635,744	08/05/2003	Shashank Nemawarkar	NWISP042	9662
22434	7590	08/10/2007		
BEYER WEAVER LLP P.O. BOX 70250 OAKLAND, CA 94612-0250			EXAMINER NGUYEN, PHUOC H	
			ART UNIT 2143	PAPER NUMBER
			MAIL DATE 08/10/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

80

Office Action Summary	Application No. 10/635,744	Applicant(s) NEMAWARKAR ET AL.	
	Examiner Phuoc H. Nguyen	Art Unit 2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>2/26/04, 1/9/06, 2/17/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The abstract of the disclosure is objected to because the abstract is written more than 150 words in length. Correction is required. See MPEP § 608.01(b).
3. The disclosure is objected to because of the following informalities:

The applicant is advised to update information cited under the "Cross-References to Related Applications" section in page 1 of original specification.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 3-9, and 12-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Carpenter et al. (U.S. 6,081,874).

Re claim 1, Carpenter et al. disclose in Figure 1 an interconnection controller (e.g. abstract with controller in each clusters 10 as seen in Figure 1), comprising: an intra-cluster interface configured for coupling with intra-cluster links to a plurality of local processors arranged in a point-to-point architecture in a local cluster (e.g. Figure 1 with the node controller 20 wherein each of the node controller is communicated with other clusters via another corresponding node controller); an inter-cluster interface configured for coupling with an inter-cluster link to a non-local interconnection controller in a non-local cluster (e.g. within the cluster 10x as seen in Figure 1); a transceiver configured to receive an intra-cluster packet from the local processors via the intra-cluster links of the coherent interface and encapsulate the intra-cluster packet as a high-speed link packet by adding a sequence identifier and a packet type identifier to the intra-cluster packet (e.g. col. 4 line 55 col. 5 line 42); and a serializer/deserializer configured to serialize the high-speed link packet and forward the serialized high-speed link packet to the inter-cluster interface for transmission to the non-local interconnection controller via an inter-cluster link (e.g. col. 4 lines 2-11 as in case of serialized port).

Re claim 3, Carpenter et al. further disclose in Figure 1 the inter-cluster interface is further configured to receive high-speed link packets from the non-local interconnection controller, wherein the serializer/deserializer is further configured to deserialize the encoded, serialized packets and wherein the transceiver is further

configured to perform a cyclic redundancy code check on the deserialized packets (e.g. col. 4 lines 2-11 where CRC is applied for correction).

Re claim 4, Carpenter et al. further disclose in Figure 1 the sequence identifier and the packet type identifier are encoded in a header of the high-speed link packet (e.g. as for assemble or disassemble the encoded packet).

Re claims 5 and 12, Carpenter et al. further disclose in Figure 1 the sequence identifier and the packet type identifier are encoded in a portion of the high-speed link packet reserved for link-layer encoding that are transparent to a protocol layer (e.g. at proper layer for hardware encoding).

Re claim 6, it is an integrated circuit claim having similar limitations cited in claim 1. Thus, claim 6 is also rejected under the same rationale as cited in the rejection of rejected claim 1.

Re claim 7, it is a semiconductor claim having similar limitations cited in claim 1. Thus, claim 7 is also rejected under the same rationale as cited in the rejection of rejected claim 1.

Re claim 8, it is a computer medium claim having similar limitations cited in claim 1. Thus, claim 8 is also rejected under the same rationale as cited in the rejection of rejected claim 1.

Re claim 9, Carpenter et al. further disclose in Figure 1 the transceiver is further configured to encode a packet length field in a header of the high-speed link packet (e.g. Figure 1 as to transmit packet across to other nodes outside cluster).

Re claim 13, it is an application-specific integrated circuit claim having similar limitations cited in claim 1. Thus, claim 13 is also rejected under the same rationale as cited in the rejection of rejected claim 1.

Re claim 14, it is a simulatable representation claim having similar limitations cited in claim 1. Thus, claim 14 is also rejected under the same rationale as cited in the rejection of rejected claim 1.

Re claim 15, it is a code description claim having similar limitations cited in claim 1. Thus, claim 15 is also rejected under the same rationale as cited in the rejection of rejected claim 1.

Re claim 16, it is a compilation claim having similar limitations cited in claim 1. Thus, claim 16 is also rejected under the same rationale as cited in the rejection of rejected claim 1.

Re claim 17, it is a hardware design claim having similar code limitations cited in claim 15. Thus, claim 17 is also rejected under the same rationale as cited in the rejection of rejected claim 15.

Re claim 18, it is a system having similar limitations cited in claim 1. Thus, claim 18 is also rejected under the same rationale as cited in the rejection of rejected claim 1.

Double Patenting

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined

Art Unit: 2143

application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1-18 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 16-25 of U.S. Patent No. 7,117,419. Although the conflicting claims are not identical, they are not patentably distinct from each other because:

Claims 16-25 of Patent No. 7,117,419 contain every element of claims 1-18 of the instant application and thus anticipated the claims of the instant application. Claims of the instant application therefore are not patently distinct from the earlier patent claims and as such are unpatentable over obvious-type double patenting. A later patent/application claim is not patentably distinct from an earlier claim if the later claim is anticipated by the earlier claim.

8. Claims 1-18 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 15-25 of U.S. Patent No. 7,103,823. Although the conflicting claims are not identical, they are not patentably distinct from each other because:

Claims 15-25 of Patent No. 7,103,823 contain every element of claims 1-18 of the instant application and thus anticipated the claims of the instant application. Claims of the instant application therefore are not patently distinct from the earlier patent claims and as such are unpatentable over obvious-type double patenting. A later patent/application claim is not patentably distinct from an earlier claim if the later claim is anticipated by the earlier claim.

"A later patent claim is not patentably distinct from an earlier patent claim if the later claim is obvious over, or **anticipated by**, the earlier claim. In re Longi, 759 F.2d at 896, 225 USPQ at 651 (affirming a holding of obviousness type double patenting because the claims at issue were obvious over claims in four prior art patents); In re Berg, 140 F.3d at 1437, 46 USPQ2d at 1233 (Fed. Cir. 1998) (affirming a holding of obviousness-type double patenting where a patent application claim to a genus is anticipated by a patent claim to a species within that genus). " ELI LILLY AND COMPANY v BARB LABORATORIES, INC., United States Court of Appeals for the Federal Circuit, ON PETITION FOR REHEARING EN BANC (DECIDED: May 30, 2001).

"Claim 12 and Claim 13 are generic to the species of invention covered by claim 3 of the patent. Thus, the generic invention is "**anticipated**" by the species of the patented invention. Cf., Titanium Metals Corp. v. Banner, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985) (holding that an earlier species disclosure in the prior art defeats any generic claim) 4 . This court's predecessor has held that, without a terminal disclaimer, the species claims preclude issuance of the generic application. In re Van Ornum, 686 F.2d 937, 944, 214 USPQ 761, 767 (CCPA 1982); Schneller, 397 F.2d at 354. Accordingly, absent a terminal disclaimer, claims 12 and 13 were properly rejected under the doctrine of obviousness type double patenting." (In re Goodman (CA FC) 29 USPQ2d 2010 (12/3/1993).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

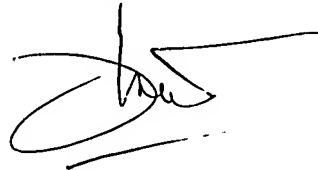
- a. U.S. Patent No. 6,370,585
- b. U.S. Patent No. 6,192,452
- c. U.S. Patent No. 6,779,036
- d. U.S. Patent No. 6,081,874
- e. U.S. Patent Publication Application No. 2003/0088754

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuoc H. Nguyen whose telephone number is 571-272-3919. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on 571-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Phuoc H Nguyen
Examiner
Art Unit 2143

A handwritten signature in black ink, appearing to be 'Phuoc H. Nguyen', written over a horizontal line.

July 25, 2007